Making Data and Fax Calls

Your mobile phone contains a modem similar to the modems you use to connect your computer to your home or office telephone service. Rather than connecting to standard telephone lines, the modem in your mobile phone allows you to connect your computer to the mobile telephone system. In places where mobile network operators provide the necessary support, you can use your mobile phone to send or receive faxes, upload or download data files, or access the Internet. An approved cable (serial or USB) is required to connect your mobile phone to your computer before making data or fax calls.

Data, Fax, and Internet Calls

Your phone can handle data, fax, and Internet calls, but each type of call requires corresponding software that must be running on your computer.

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Data Calls

Data calls are placed to exchange computer files between two computers. While the data connection is in place, files can be transferred between the connected computers, according to the capabilities of the software in use. When a data call is made, the connection remains in place until it is closed by one of the computers involved. To make or receive data calls with your mobile phone, you must have a properly configured communications program running on your computer.

Fax Calls

Fax calls are placed to send fax messages. When a fax message has been sent, your fax software or the originating fax machine terminates the call. To make or receive fax calls with your mobile phone, you must have a properly configured fax program running on your computer.

Internet Calls

Internet calls are placed to Internet Service Providers (ISP) when you want to use email or access websites on the Internet. To make Internet calls, you must have an account with an ISP and a properly configured Internet access program (browser) running on your computer. When your software is installed and set up to dial your ISP, calls can be made using the normal dialing procedure. Once a connection to your ISP is established, it remains in place until either you or your ISP disconnects the call.

There are three different services your phone can use to connect to the Internet. The installation procedure for each varies slightly depending on the service that is used. Check with your service provider to determine which services are available in your area.

- Regular speed data calls (also known as asynchronous data calls)
- Regular speed packet-data calls
- High-speed packet data calls (also known as IS-2000)

Note! Throughout this chapter, all regular speed data and regular speed packet-data call will be referred to as “regular speed data calls”. High-speed packet data calls will be referred to as “high-speed data calls.”

Quick Net Connect

Quick Net Connect establishes an Internet connection quickly, easily, and economically. The digital connection bypasses the typically-used analog modems and connects to the Internet in a matter of seconds. Contact your service provider for more information.

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Before You Start

Before setting up your phone for data operation, do the following:

1 You must have a cable to connect your mobile phone to your computer. There are two types of cable available:
   - The DRS-11 attaches to a serial port on your PC. It can be used with any operating system and works for all types of data/fax services. If you are using high-speed Internet service with this cable, you may also want to install a high-speed serial port in your PC. The high-speed

serial port allows you to take full advantage of the speeds offered with this service.

- The DCU-10 attaches to the USB port of your computer. It is the recommended cable for high-speed Internet service. It can only be used if your PC uses one of the following operating systems: Windows 98 Second Edition, Windows ME, or Windows 2000.

2 Confirm that your mobile service provider supports **digital data services** in your planned usage area and that you have the necessary subscription.

3 Confirm that your computer has the following hardware or software:

a An operating system that supports data access software, such as Windows 98 or Windows 2000.

b Appropriate fax (class 2.0), Internet access, or file transfer software. Class 2.0 is different from Class 2.

4 Download the T60c drivers from www.SonyEricssonMobile.com/mobileinternet. Be sure to note where you save the file.

Note! If you are trying to connect to a 25-pin serial interface port on your computer, you will need a 9-pin to 25-pin serial adapter. You can purchase this adapter at most computer supply stores.

Understanding This Insert

The following instructions refer to settings in your T60c and in your PC.

- Text that can be seen in the PC is shown in the following typeface: **Start**.
- Text that can be seen in the T60c is shown in the following typeface: **Settings**.
- Softkey names are shown in the following typeface: Select.

Installation

The procedure used for the first-time setup of your phone and computer depends on your operating system and the type of cable being used.

- **Windows XP**: DRS-11
- **Windows 98**, **ME**: DRS-11

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- **Windows 2000**: DRS-11
- **Windows NT 4.0**: DRS-11
- **Windows 98 Second Edition**, **ME**, **2000**: DCU-10

Windows XP Using DRS-11

1 If you plan to use a high-speed serial port, install and configure it now according to the manufacturer's directions. Make sure the speed is set to **230400 bps**.

2 Connect your computer to your phone. The cable has a plug on one end that matches the receptacle on the bottom of your mobile phone. The other end of the cable has a 9-pin female connector that matches the standard 9-pin serial interface port connector. Connect one end of the cable to your mobile phone and the other end to the serial port on your computer.

3 Make sure the phone is turned on.

4 Reboot the PC. You must logon using an account with administrator privileges. Contact your network administrator or help desk for more information.

5 The PC should detect your phone as "new hardware" and automatically launch a new hardware wizard. If it does not, you must manually setup the T60c. See "Manually Installing T60c Modem Drivers" on page 7.

6 Click **Next** to proceed. Select **Install from a list or specific location** and click **Next.**

7 Make sure **Include this location in the search** is checked.

8 Click the **Browse** button and navigate to the directory where you downloaded the T60c drivers. Click **OK**, then click **Next** to proceed.

9 A window may appear warning you that the driver has not passed Windows Logo Testing. Click **Continue Anyway**.

10 Windows installs the driver. Click **Finish** to close the wizard.

11 Set up your data access software according to the instructions supplied with it. Look for **Ericsson T60c Data Fax Modem** in modem list when configuring software which will access the handset as a modem.

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Windows 98 or Windows ME Using DRS-11

1 If you plan to use a high-speed serial port, install and configure it now according to the manufacturer's directions. Make sure the speed is set to **230400 bps**.
2 Shut down Windows and turn off your PC.
3 Connect your computer to your phone. The cable has a plug on one end that matches the receptacle on the bottom of your mobile phone. The other end of the cable has a 9-pin female connector that matches the standard 9-pin serial interface port connector. Connect one end of the cable to your mobile phone and the other end to the serial port on your computer.
4 Make sure the phone is turned on.
5 Turn on the PC. The PC should detect your phone as "new hardware" and automatically launch the **Add New Hardware** wizard. If it does not, you must manually setup the T60c. See "Manually Installing T60c Modem Drivers" on page 7.
6 The next step depends on the operating system installed on your PC.
   - If you are running Windows 98 Second Edition (SE), select **Search for the best driver for your device** and click **Next**.
   - If you are running Windows ME, select **Specify location of the driver** and click **Next**.
7 Check **Specify a location**.
8 Click the **Browse** button and navigate to the directory where you downloaded the T60c drivers. Click **OK** to proceed.
9 Click **Next**. Windows displays a window indicating that it found the (best) driver for the device. Click **Next**.
10 Windows finishes installing the modem. Click **Finish** when prompted.
11 Set up your data access software according to the instructions supplied with it. Look for **Ericsson T60c Data Fax Modem** in modem list when configuring software which will access the handset as a modem.

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Windows 2000 Using DRS-11

1 If you plan to use a high-speed serial port, install and configure it now according to the manufacturer's directions. Make sure the speed is set to **230400 bps**.
2 Connect your computer to your phone. The cable has a plug on one end that matches the receptacle on the bottom of your mobile phone. The other end of the cable has a 9-pin female connector that matches the standard 9-pin serial interface port connector. Connect one end of the cable to your mobile phone and the other end to the serial port on your computer.
3 Make sure the phone is turned on.
4 Reboot the PC. You must logon using an account with administrator privileges. Contact your network administrator or help desk for more information.
5 The PC should detect your phone as "new hardware" and automatically launch a new hardware wizard. If it does not, you must manually setup the T60c. See "Manually Installing T60c Modem Drivers" on page 7.
6 Click **Next** to proceed. Select **Search for a suitable driver** and click **Next**. Make sure **Specify a location** is checked. Click **Next**.
7 Click the **Browse** button and navigate to the directory where you downloaded the T60c drivers. Click **Open**. Click **OK** to proceed.
8 Windows displays a windows indicating it found the driver. Click **Next** to proceed.
9 A message titled **Digital Signature Not Found** appears. Click **Yes** to proceed.
10 Windows installs the driver. Click **Finish**.
11 Set up your data access software according to the instructions supplied with it. Look for **Ericsson T60c Data Fax Modem** in modem list when configuring software which will access the handset as a modem.

Windows NT 4.0 Using DRS-11

See "Manually Installing T60c Modem Drivers" on page 7.

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Windows 98, ME, or 2000 Using DCU-10

Note! If you are running Windows 2000, you must be logged on with administrator privileges before proceeding. Contact your network administrator or help desk for more information.

1 Turn on your mobile phone.
2 Connect the phone to the USB cable.
3 Connect the USB cable to the PC and install it according to the directions that came with the cable. The PC identifies it as new hardware and installs a new serial port named **USB Cable DCU-10**.
4 Go to **Start, Settings**, **Control Panel** and double click on **System**. If running ME, and **Modem** is not listed, click on the blue link **View All Control Panel Options**.
5 Click on the tab **Device manager.** Scroll down to **Ports (COM & LPT)** and double-click it to expand the tree.
6 Double-click on the port **USB Cable DCU-10**.
7 Click on **Port Settings**. Make sure **Bits per second** is set to **230400 bps** and **Flow control** is set to **Hardware**.
8 Click **OK** to close USB port properties windows. Click **OK** to close the system properties window.
9 If your PC did not detect your phone, see "Manually Installing T60c Modem Drivers" on page 7.

Manually Installing T60c Modem Drivers

1 Click **Start**.
2 Click **Settings**. Note! **Window XP** users should skip this step.
3 Click **Control Panel**.
4 When using:

Windows 98

a Double click on **Modems**.

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b If you already have modems installed, **Add** will appear as an option. Click **Add**. Otherwise proceed to Step 5.

Windows ME

a If modem is not listed click on the blue link **View all control panel options**.
b Double click on **Modems**.
c If you already have modems installed, Add will appear as an option. Click **Add**. Otherwise, proceed to step 5.

Windows NT

a Click on **Modems**.
b If you already have modems installed, **Add** will appear as an option. Click **Add**. Otherwise, proceed to Step 5.

Windows 2000

a Double click on **Phone and Modems**.
b Click on **Modem**.
c Click **Add**.

Windows XP

a Click on **Printer and Other Hardware**.
b Click on **Phone and Modem options**.
c Click on **Modems**.
d Click **Add**.

5 Click on **Don't detect my modem**. Then click **Next**.
6 Click on **Have Disk**.
7 Click on **Browse**. Locate the file you downloaded from the Sony Ericsson website.
8 Select the Inf. for the T60c.
9 When using:

Windows 98 and Windows ME

Click **OK**.

Windows NT, Windows 2000, or Windows XP

Click **Open**.

10 Click **OK**.
11 Select **Ericsson T60c Data Fax Modem** and then click **Next**.
12 Select the communications port. Then click **Next**.
13 When using:

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Windows 2000

A message box called **Digital Signature Not Found** is displayed. Click on **Yes**.

Windows XP

A box titled **Hardware Installation** is displayed. This box indicates the Inf. has not passed the logo test. Click **Continue Anyway**.

14 If prompted, enter the dialing properties.
15 Click **Finished**.
16 You have installed the Inf. File/Drivers for the T60c Phone.

High-Speed Data Setup

Note! If you are using regular speed data, fax, and Internet service, you do not need to perform the steps in this section.

1 Attach the phone to your PC and make sure it is turned on.
2 In the phone, select **Settings**, **DataFaxModem**, **Modem Speed**.
3 Select the appropriate speed based on the type of cable or serial port you are using:
   - If you are using a high-speed serial port or the DCU-10 USB cable with your T60c, then select **230400 bps**.
   - If you are using a regular serial port with your T60c, then select **115200 bps**.
4 On your PC, navigate to the window containing the list of installed modems:

Windows NT 4.0, Windows 98, or Windows ME

a Go to **Start**, **Settings, Control Panel**.
b Double click on **Modems**.

Windows 2000

a Go to **Start, Settings, Control Panel, Phone and Modem Options**.
b Click **Modems**.

Note! If the **Properties** button is grayed out, then restart your PC with the phone attached and turned on.

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Windows XP

a Go to **Start**, **Control Panel**, **Printers and Other Hardware**, **Phone and Modem Options**.

b Click on the **Modems** tab. Note: If the **Properties** button is grayed out, then restart your PC with the phone attached and turned on.

5 Select **Ericsson T60c Data Fax Modem** and click the **Properties** button.

Note! For Windows XP, you must also have to click on the **Modem** tab after clicking on the **Properties** button.

6 Change the setting **Maximum Speed** or **Maximum Port Speed** so that it matches the speed you chose in your mobile phone:

- If you are using a high-speed serial port or the DCU-10 USB cable with your T60c, then select **230400 bps**.
- If you are using a regular serial port with your T60c, then select
- **115200 bps**.

7 Accept the changes.

8 Close the window.

Operation

Making Data and Fax Calls

Review the instructions from your mobile service provider that describe the procedures and rules for making and receiving data calls in your area.

To avoid unnecessary airtime charges, terminate your data calls as soon as you have finished transferring files by pressing the right soft key.

Making Voice Calls While Connected to Your Computer

You can originate voice calls when you are not on a data call. You can receive voice calls if **Data/Fax** is set to **Voice Calls**. Your mobile phone enables you to initiate voice calls from Windows applications when connected to the **Ericsson Voice Call Dialer**. This is particularly useful if you have contact cards with phone numbers in a contact management application. You can open a contact card, click on the phone icon, and originate a call using your mobile phone. Then you simply pick up your mobile

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phone and continue the call. The **Ericsson Voice Call Dialer** is compatible with most contact manager software packages.

To install this feature, follow the directions in "Manually Installing T60c Modem Drivers" on page 7, except you must select the modem labeled **Ericsson T60c Voice Call Dialer** in step 11. Also, **Modem Speed** (under **Settings**, **DataFaxModem** in your phone) must be set to **Up to 19200 bps**.

Use With Other Accessories

Charger

To charge your phone's battery with an approved charger during data operation, do the following:

1. Plug the charger cable into the serial or USB cable. The charge connector is located on the end of the cable that plugs into the phone.
2. Plug the charger cable into the wall outlet or cigarette lighter.

Bluetooth™ Phone Adapter DBA-10

Before using the high-speed modem option and the Bluetooth™ Phone Adapter, **Modem Speed** (under **Settings**, **DataFaxModem** in your phone) must be set to **115200 bps**. After use, restore the **Modem Speed** setting to its previous value. Failure to do this will make the phone adapter inoperable and may interfere with the high-speed modem operation.

CommuniCam MCA-10 or MCA-20

Before using the high-speed modem option and the CommuniCam MCA-10 or MCA-20, **Modem Speed** (under **Settings**, **DataFaxModem** in your phone) must be set to **Up to 19200 bps** before attaching the CommuniCam. After use, restore the **Modem Speed** setting to its previous value. Failure to do this will make the CommuniCam inoperable and may interfere with the high-speed modem operation.

Achieving Best Performance

Charging your Battery

Both your mobile phone and your laptop computer batteries should be well-charged before starting data operation. This will help you avoid interruptions due to loss of power. You can charge your phone's battery with an approved charger during data/fax operation as mentioned previously.

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Signal Strength

It is important to maintain a good signal path between the phone and the mobile telephone system when making data calls. Signals are generally stronger when the phone is in an upright position and the antenna is fully extended. If you are indoors, your signal is generally stronger when the phone is near a window.

In a Vehicle

It is possible to receive data calls while in your vehicle. Operation from a moving vehicle may not be satisfactory because data may be lost when your call is transferred from one mobile base station to another. Be sure to give full attention to driving and pull off the road and park before making or receiving calls, if driving conditions so require.

Transmission Disturbances

Brief interruptions of mobile telephone signals that would not be bothersome during a voice call may cause problems during data operation, depending upon the error correction capabilities of the software being used. Such interruptions are uncommon during stationary operation, but can be caused by vehicles or people passing nearby, especially in areas of low signal strength. You can use the signal strength indicator on your phone to verify that you have a good signal path.

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Troubleshooting

Your PC does not recognize the phone.

You may need to install your phone's modem drivers. See "Manually Installing T60c Modem Drivers" on page 7.

You cannot set up or maintain a data/fax session.

This occurs if you are inadvertently originating a voice call when attempting a data/fax call. To correct the problem, do the following:

1. From the **Start** menu on your Windows desktop, click on **Settings**, then **Control Panel**.
2. Double-click the **Modems** icon.
3. Select the **General** tab.
4. Select **Ericsson T60c Data Fax Modem** from the pull-down list.
5. Click **Properties**.

6 Click **General**. Make sure that the maximum speed is set to **19200 bps**.
7 Select the **Connection** tab.
8 Click **Advanced**.
9 In the Extra settings box, type the following: &C1+CRM=0;
10 Click **OK** to return to the **Connection** tab.
11 Click **OK** to return to **Modem Properties**.
12 Click **Close**.

If you are using an application that supplies its own box for entering extra settings, then type the following command string into that box

as well: +COS=4,1,2,0; +ES=1,0,1; +DS=0,0,512,6;

You cannot originate voice calls from the PC.

1 From the **Start** menu on your Windows desktop, click on **Settings**, then **Control Panel**.
2 Double-click the **Modems** icon.
3 Select the **General** tab.
4 Select **Ericsson T60c Voice Call Dialer** from the pull-down list.
5 Click **Properties**.
6 Select the **Connection** tab.
7 Click **Advanced**.
8 Type the following in the **Extra Settings** box of the Advanced Connection Settings window: *ERVNOK=1
9 Click OK to return to the **Connection** tab.
10 Click OK to return to **Modem Properties**.
11 Click **Close**.

You are having trouble initiating data/fax calls from your computer.

Check to see if your COM ports are occupied. If so, you must temporarily disable the software applications that are using the COM port.

You cannot receive data or fax calls

1 Review the instructions from your mobile service provider that describe the procedures and rules for making and receiving data calls in your area.
2 Set up your phone and computer as described above.
3 Choose **DataFaxModem** from the **Settings** menu in your mobile phone.

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4 Choose **Data/Fax**.
5 The current selection is indicated by a filled radio button.
6 Scroll until the call type for the next call is highlighted. The available call types are: **Voice Calls**, **Next Call Fax**, **Fax On**, **Next Call Data**, and **Data On**.
   - **Voice Calls** setting is active until you choose a different setting.
   - **Fax On** and **Data On** settings apply until you power off your phone.
   - **Next Call Fax** and **Next Call Data** settings apply only for the next incoming call. Afterwards, the phone automatically switches back to **Voice Calls**.
7 Press Select to choose the highlighted call type.
8 The call type you chose now appears in the display. Your phone is now configured for your next incoming call.

Error Messages

- **The modem is not responding properly.**
- **Hardware failure in port or attached device.**

Check to see if the COM ports speed in the phone is set properly and matches the setting of the T60c modem.

Technical Assistance

- North America - +1-800 ERICSSON (1-800-374-2776)
- Latin America - +305-755-6789
- Other countries - +1 919-472-7908

Downloading the T60c Drivers

http://www.SonyEricssonMobile.com/mobileinternet

Ordering Accessories

You can purchase accessories by:

- Visiting http://www.SonyEricssonMobile.com
- Calling +1-305 755-6789 (outside the U.S.) 1-800-374-2776 (inside the U.S.)
- Visiting your local Sony Ericsson retailer.

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